IN THE CLAIMS:

Claims 33-40 were presented in the previous Amendment (Amendment B). All pending claims and their present status are produced below.

1. (Canceled)

2. (Canceled)

3. (Canceled)

4. (Canceled)

5. (Canceled)

6. (Canceled)

7. (Canceled)

8. (Canceled)

9. (Canceled)

10. (Canceled)

11. (Canceled)

12. (Canceled)

13. (Canceled)

14. (Canceled)

15. (Canceled)

16. (Canceled)

17. (Canceled)

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (Canceled)

22.   (Canceled)

23.   (Canceled)

24.   (Canceled)

25.   (Canceled)

26.   (Canceled)

27.   (Canceled)

28.   (Canceled)

29.   (Canceled)

30.   (Canceled)

31.   (Canceled)

32.   (Canceled)

33.   (Currently amended) A method of predicting the performance of an application in a

multi-hop network, the multi-hop network comprising a client and a server and

having a path, the method comprising:

determining, for each thread of the application, a set of application factors

    corresponding to a set of functions performed by the application, the

    application factors being independent of the network and of a network flow

    control protocol, the application factors comprising average packet size and

    average node send time;

determining a set of network delay times corresponding to a series of network delay

    sources along the multi-hop network path, the network delay sources

    comprising a queuing delay, a bandwidth delay, a bottleneck delay, and one of

    a transmission delay, a constant delay, and a node delay;

determining a set of network flow factors corresponding to the network flow control protocol, the network flow factors comprising a number of turns added per direction, the direction relative to the client and the server, wherein said determining a set of network flow factors comprises generating a histogram of node send time and determining the number of turns added per direction based on the histogram;

determining a duration of each thread of the application based on the application factors, the network delay times and the network flow factors; and

determining a total response time based on the durations of the threads.

34. (Canceled)

35. (Currently amended) An apparatus for predicting the performance of an application in a multi-hop network, the multi-hop network comprising a client and a server and having a path, the apparatus comprising:

means for determining, for each thread of the application, a set of application factors corresponding to a set of functions performed by the application, the application factors being independent of the network and of a network flow control protocol, the application factors comprising average packet size and average node send time;

means for determining a set of network delay times corresponding to a series of network delay sources along the multi-hop network path, the network delay sources comprising a queuing delay, a bandwidth delay, a bottleneck delay, and one of a transmission delay, a constant delay, and a node delay;

means for determining a set of network flow factors corresponding to the network

flow control protocol, the network flow factors comprising a number of turns

added per direction, the direction relative to the client and the server, wherein

said means for determining a set of network flow factors comprises means for

generating a histogram of node send time, and means for determining the

number of turns added per direction based on the histogram;

means for determining a duration of each thread of the application based on the

application factors, the network delay times and the network flow factors; and

means for determining a total response time based on the durations of the threads.

36.   (Canceled)

37.   (Currently amended) A computer readable medium comprising computer readable

instructions which, when executed by a processing system, cause the processing

system to perform a method of predicting the performance of an application in a

multi-hop network, the multi-hop network comprising a client and a server and

having a path, the method comprising:

determining, for each thread of the application, a set of application factors

corresponding to a set of functions performed by the application, the

application factors being independent of the network and of a network flow

control protocol, the application factors comprising average packet size and

average node send time;

determining a set of network delay times corresponding to a series of network delay

sources along the multi-hop network path, the network delay sources

comprising a queuing delay, a bandwidth delay, a bottleneck delay, and one of

a transmission delay, a constant delay, and a node delay;

determining a histogram of node send time;

determining a set of network flow factors corresponding to the network flow control

protocol, the network flow factors comprising a number of turns added per

direction, the direction relative to the client and the server, wherein the

number of turns added per direction is based on the histogram;

determining a duration of each thread of the application based on the application

factors, the network delay times and the network flow factors; and

determining a total response time based on the durations of the threads.

38.   (Canceled)

39.   (Currently amended) An apparatus for predicting the performance of an application

in a multi-hop network, the multi-hop network comprising a client and a server and

having a path, the apparatus comprising:

application factor logic for determining, for each thread of the application, a set of

application factors corresponding to a set of functions performed by the

application, the application factors being independent of the network and of a

network flow control protocol, the application factors comprising average

packet size and average node send time;

delay time logic for determining a set of network delay times corresponding to a series of network delay sources along the multi-hop network path, the network delay sources comprising a queuing delay, a bandwidth delay, a bottleneck delay, and one of a transmission delay, a constant delay, and a node delay;

histogram logic for generating a histogram of node send time;

flow factor logic for determining a set of network flow factors corresponding to the network flow control protocol, the network flow factors comprising a number of turns added per direction, the direction relative to the client and the server, wherein the number of turns added per direction is based on the histogram;

first duration logic for determining a duration of each thread of the application based on the application factors, the network delay times and the network flow factors; and

second duration logic for determining a total response time based on the durations of the threads.

40.   (Canceled)